From: Archer, Spencer

To: Zion, Rodney E CIV USARMY CENWS (US)

Cc: Reitter, Eric T; garyfulton@ferconinc.com; Projectmail - Bunker Hill CTP_USACE; Bevier, Marie L; Kunas, Karl J

CIV USARMY CENWS (US); Hand, Charles; Moreen, Ed

Subject: Bunker Hill - Weekly O&M Update (16 July)

Date: Friday, July 20, 2018 6:46:32 AM

Attachments: <u>image001.png</u>

BHCTP Data (7-10 to 7-16).xls

Rod.

The weekly Bunker Hill Central Treatment Plant (CTP) and Kellogg Tunnel (KT) data package is attached for your review.

CTP Operations:

- Reactor pH: The pH set point was set at 8.4-8.5 during this reporting period
- 006 Effluent Zinc (Average): 0.308 mg/L (n = 3, July 6 July 11)
- 006 Effluent pH (Average): 6.80 s.u. (n = 3, July 6 July 11)
- 006 Effluent Turbidity (Average): 0.83 NTU (n = 7, July 10 July 16)
- Average Monthly Lime Usage (July): 4.23 tons per day
- Flocculant Dose: Flocculant dose remained at 1.6 ppm during this reporting period

Kellogg Tunnel:

- KT Flow: Currently estimated at 1,750 gpm at this time
- KT Zinc: 146 mg/L (n = 2, June 25, June 28)
- KT pH: 2.85 s.u. (Lab n = 2, June 25, June 28) 2.87.u. (Field - n = 2, July 12, July 16)
- The mine pool pump was removed from service at 10:30 on Wednesday July 11 and placed back into service at 12:30 Friday July 13

Lined Pond:

• Current Volume: 0.75 MG

Additional Items:

- Lime loop #2 1.5" discharge pipe failed July 6, operators replaced pipe section that failed July 10.
- CTP was placed into temporary shutdown July 12 from 08:30 11:30 for B&L Contracting to perform warranty repair of PVC water pipe in lime silo.
- The lime slurry pressure valve plugged with debris July 16
 - o Operators flushed the lime slurry loop to remove the blockage; lime slurry loop is back to normal operating pressure at this time.
- AMD line pigging and annual video inspections scheduled for August 14 August 16
 o The BH mine managers have agreed to remove the mine pool pump from service
 for the scheduled pigging event

Thanks,

Spencer Thomas Archer, P.E., BCEE

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